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A PHASED ARRAY RADIO FREQUENCY PULSE GENERATOR

ABSTRACT

A phased array radio frequency pulse generator includes a plurality of radio frequency pulse generator units (4, 4a, 4b, 4c) each having a non-linear dispersive electrical circuit (1) incorporating at least one non-linear element (5) including a material sensitive to low power signals (7) and a means (6) for producing a variable power control signal (7) and applying it to be at least one non-linear element (5) to modify the extent of the non-linearity of the element and thereby vary the timing of the radio frequency electrical output signal generated, and means (13) for adjusting the value of the control signals (7) provided in each unit (4, 4a, 4b, 4c), to vary the relative phases of the output signals from the units (4, 4a, 4b, 4c) in a phased array on a pulse to pulse basis.

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